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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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09/336, 207 06/18/99 MCCRACKEN

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DES MOINES IA 50309-3993

EXAMINER

HORTON, Y

ART UNIT

PAPER NUMBER

3635

DATE MAILED:

02/05/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

## Office Action Summary

|                               |                                    |
|-------------------------------|------------------------------------|
| Application No.<br>09/336,207 | Applicant(s)<br>ROBERT G. McCACKEN |
| Examiner<br>Yvonne M. Horton  | Group Art Unit<br>3635             |



Responsive to communication(s) filed on Dec 11, 2000

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle* 1035 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

### Disposition of Claim

- Claim(s) 1-11 is/are pending in the application
- Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration
- Claim(s) \_\_\_\_\_ is/are allowed.
- Claim(s) 1-11 is/are rejected.
- Claim(s) \_\_\_\_\_ is/are objected to.
- Claims \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

- Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- All  Some\*  None of the CERTIFIED copies of the priority documents have been received.
- received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

- Notice of References Cited, PTO-892
- Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- Interview Summary, PTO-413
- Notice of Draftsperson's Patent Drawing Review, PTO-948
- Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1,4,5,6,7,8,9,10 and 11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable, respectively, over claims 1,2,3,4,5,6,7,8,9 and 10 of U.S. Patent No. 5,956,919. Although the conflicting claims are not identical, they are not patentably distinct from each other because end plates are old and very well known in the art for their use in providing a means for interconnecting adjacent beam members.

### *Claim Rejections - 35 USC § 103*

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-5 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over

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CH 000414118 in view of U.S. Patent #3,716,959 to BERNARDI. CH 000414118 discloses a beam (B) including a pair of longitudinally extending and opposing flanges (2) each having a central web section (W), a pair of inwardly extending leg sections (L); and a convoluted web member (1) having alternating protrusions (4) adjacent to leg sections (L), (See marked-up attachment). The web member (1) is secured to the central web section (W) of the flanges (2), and the protrusions (4) are secured to the leg sections (L) by securing means (3). CH 000414118 discloses the basic claimed beam except for the use of end plates. The use of brackets and end plates to provide for the capability of interconnecting beam members is old and very well known in the art. BERNARDI teaches that it is known in the art to provide a beam structure (10) with end plates (36). It would have been obvious to one having ordinary skill in the art to provide the beam member of CH 000414118 with the end plates of BERNARDI in order to enable adjacent beam structures to be secured together and to provide the beam structure with added stiffness adjacent the ends thereof. Without end plates, a beam is weaker at the ends and are more likely to give under force applied at the ends. In reference to claim 2, the inward legs of CH 000414118 are not recessed; however, it would have been obvious to one having ordinary skill in the art to recess the leg members in order to ensure that the end plate fits flush against the beam member. Recesses and tapers are old and very well known in the art when accommodating a sure fit with adjacent or interfitting members while attempting to secure them together. Regarding claim 3, the size of the recess with respect to the end plate is an obvious matter of design choice which would depend upon how flush the end plate is needed to fit with the flange members. In reference to claims 4 and 5 the web member (W) and the flanges (2) of CH 000414118 are coextensive in

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length and are made from sheet metal, (obtained from a brief translation). In regards to claims 8 and 9, the web member (W) is secured to the central web section (20) of the flanges (2) by welds (3), and the protrusions (4) are also secured to the leg sections (L) by welds (3). Regarding claim 10, the flanges are formed from sheet material, a material that inherently enables the flange members to be penetrated if desired or needed. In reference to claim 11, the flanges (2) are C-shaped and leg sections (2) include in-turned portions (IT), (See also the marked-up attachment).

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over CH 000414118 in view of U.S. Patent #3,716,959 to BERNARDI, as applied to claim 1 above, and further in view of U.S. Patent #5,956,919 to McCracken. CH 000414118, as modified by BERNARDI discloses the basic claimed beam except for the specifics of the material characteristics. McCracken, in column 3, lines 25-29, teaches that the metal forming the web and the metal forming the flanges have "distinct" characteristics and thicknesses - the web being 0.0598 inches and 16 gauge and the flanges being 0.0747 inches and 14 gauge. Hence, it would have been obvious to one having ordinary skill in the art to form the web and flanges out of a metal having "distinct" characteristics and thicknesses in order to be used as a replacement for lumber beams which are conventional in the art for door and window framing members, but are extremely susceptible to warping when encountered by moisture; or for use in forming supports for concrete structures. The applicant is further reminded that material selection and the thickness thereof is an obvious matter of design choice that depends on the desired performance characteristics of the resulting beam member.

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***Response to Arguments***

6. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

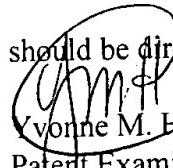
***Relevancy of Cited Art***

7. U.S. Patents #1,421,280 and #2,101,090 each disclose beam members having convoluted or corrugated web members with opposing C-shaped flanges disposed longitudinally thereon. U.S. Patent #4,548,014 discloses a beam member having convoluted or corrugated web members with opposing C-shaped flanges disposed longitudinally thereon and end plates disposed at the ends thereof. U.S. Patent #4,548,014 discloses all of the basic claimed elements except for there being protrusions adjacent the leg portions of the flanges.

U.S. Patents #3,905,171; 4,031,686; 4,228,631; 5,996,303 each disclose beam members having convoluted or corrugated web members with opposing flanges disposed longitudinally thereon and end plates disposed at the ends thereof. These patents disclose the basic claimed beam except for the flanges being C-shaped and there being protrusions adjacent the leg portions of the flanges.

8. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Yvonne M. Horton whose telephone number is (703) 308-1909.

  
Yvonne M. Horton  
Patent Examiner  
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February 5, 2001